| Species | | Historic range | Vertebrate population where endangered or threatened | Status | When listed | Critical habitat | Special rules |
|---|---|---|---|---|---|---|---|
| Common name | Scientific name | | | | | | |
| AMPHIBIANS | | | | | | | |
| Salamander, Cheat Mountain | *Plethodon nettingi* | U.S.A. (WV) | Entire | T | 358 | NA | NA |
| Salamander, Shenandoah | *Plethodon shenandoah* | U.S.A. (VA) | Entire | E | 358 | NA | NA |

Dated: July 18, 1989.

**Susan Recce Lamson,**

*Acting Assistant Secretary for Fish and Wildlife and Parks.*

[FR Doc. 89-19440 Filed 8-17-89; 8:45 am]

BILLING CODE 4310-55-M

**50 CFR Part 17**

**RIN 1018-AB23**

## Endangered and Threatened Wildlife and Plants; Endangered Status for the Roanoke Logperch

**AGENCY:** Fish and Wildlife Service, Interior.

**ACTION:** Final rule.

**SUMMARY:** The Service determines the Roanoke logperch (*Percina rex*) to be an endangered species. Endemic to Virginia, this fish now occurs only in four widely separated populations: In the upper Roanoke River, the Pigg River, the Nottoway River and the Smith River. Each population is vulnerable because of its relatively low density and limited extent. The largest and most vigorous population, in the upper Roanoke River, is subject to the most serious threats: from urbanization, industrial development, water supply and flood control projects, and, in the upper basin, from agricultural runoff. The other three populations are subject to siltation resulting from agricultural activities and to potential chemical spills. The Smith River population is especially vulnerable because of its small size. This rule implements the protection of the Endangered Species Act of 1973, as amended, for this fish.

**EFFECTIVE DATE:** The effective date of this rule is September 18, 1989.

**ADDRESSES:** The complete file for this rule is available for inspection, by appointment, during normal business hours at the Annapolis Field Office, U.S. Fish and Wildlife Service, 1825 Virginia Street, Annapolis, Maryland 21401.

**FOR FURTHER INFORMATION CONTACT:** Mr. G. Andrew Moser at the above address (301/269-5448).

**SUPPLEMENTARY INFORMATION:**

### Background

The Roanoke logperch, (*Percina rex*), was discovered in the Roanoke River near Roanoke, Virginia in 1888 and described by Jordan (1889).

A large darter, *P. rex* reaches 14 centimeters (5.5 inches) total length. It is characterized by an elongate, cylindrical to slab-sided body, conical snout and complete lateral line. The back is dark green, the sides are greenish to yellowish and belly is white to yellowish. The upper sides and back have dark scrawlings and numerous small saddles. Bar markings on its sides are prominent, usually separated from the dorsal markings and typically ovoid in shape.

The species commonly lives 5 to 6 years; both sexes probably reach maturity by age four. Spawning occurs in April or May in deep runs over gravel and small cobble (Simonson and Neves 1986). *P. rex* feeds primarily on aquatic insect larvae, especially the larvae of chironomids and caddisflies (Burkhead 1983). During warm months, adults occupy gravel and cobble runs and riffles, while juveniles typically utilize slow runs and pools with clean sand substrates. Winter habitat of all individuals appears to be deep pools, under boulders (Burkhead 1983).

The Roanoke logperch is endemic to two river systems in Virginia—the Roanoke River drainage (including the Pigg and Smith Rivers) and the Notoway River drainage. Its distribution extends from the Ridge and Valley province through the Blue Ridge to the lower Piedmont. It now occurs in four disjunct populations located in widely separated segments of four rivers: the upper Roanoke River, the Pigg River, the Nottoway River and the Smith River. It is probable that these represent remnants of a single much larger population that once occupied much of the Roanoke drainage upstream of the fall line.

All extant populations of the Roanoke logperch are in Virginia in the river reaches described below. Within the upper Roanoke River, the logperch occurs in Roanoke and Montgomery Counties from within the city limits of Roanoke upstream into the North and South Forks of the Roanoke. It also occurs in Tinker Creek, a tributary of the upper Roanoke in Roanoke County. In the Pigg River system the logperch occurs in a 32-mile reach of the mainstem Pigg River in Pittsylvania and Franklin Counties, and in Big Chestnut Creek, a Franklin County tributary of the Pigg. In the Nottoway River system the species occurs in a 32-mile reach of the mainstem in Sussex County, Virginia, and in Stony Creek, a tributary of the Nottoway in Dinwiddie and Sussex Counties. In the Smith River system, *P. rex* occurs in a 2.5-mile reach in Patrick County upstream of Philpott Reservoir, and in Town Creek, a Smith River tributary in Henry County.

Recent survey data (Simonson and Neves 1986) indicate that the largest population of *P. rex* inhabits the Upper Roanoke River. The Pigg River system is rather sparsely inhabited by the logperch, while the Nottoway River has even lower population densities of the species. The Smith River logperch population appears to be extremely small.

Threats to the upper Roanoke population of the logperch are posed by a pending Roanoke County water supply project and a proposed U.S. Army Corps of Engineers (Corps) flood control project. Results of the most recent comprehensive survey (Simonson and Neves 1986) indicate that the species has probably already declined in the North Fork of the Roanoke. Chemical spills, which have increased in frequency in the industrialized sections of the river in Salem and Roanoke, present a continuing threat. The Pigg River and North Fork of the Roanoke are heavily impacted by silt washed from agricultural lands in the watersheds.

The Roanoke logperch has been included in three Notices of Review indicating that it was a candidate for Federal listing. These were published in May 13, 1980, Federal Register (45 FR 31447), the December 30, 1982, Federal Register (47 FR 58454), and the September 18, 1985, Federal Register (50 FR 37958). The last of these Notices placed the logperch in category 1, indicating that the Service had substantial information on hand to

support listing the species as endangered or threatened. The Service was petitioned on September 29, 1983, by Mr. Noel Burkhead to list the Roanoke logperch as a threatened species. In 1985, 1986, and 1987 evaluations of this petition the Service found that the action was warranted, but precluded from immediate proposal because of other pending proposals to list, delist or reclassify species. Notice of these findings was published in the **Federal Register** on January 9, 1986 (51 FR 996), June 30, 1987 (52 FR 24312), and July 7, 1988 (53 FR 25511), respectively. On September 7, 1988, the Service published in the **Federal Register** (53 FR 34561) a proposed rule to list the Roanoke logperch as an endangered species.

**Summary of Comments and Recommendations**

In the September 7, 1988, proposed rule and associated notifications, all interested parties were requested to submit factual reports or information that might contribute to the development of a final rule. Appropriate State agencies, county governments, Federal agencies, scientific organizations, and other interested parties were contacted and requested to comment. Newspaper notices were published in the Roanoke Times and World News on September 21, 1988, and the Richmond Times Dispatch on September 22, 1988, which invited general public comment. No public hearing was requested or held. Fourteen comments were received and are discussed below.

Eight letters indicating support for the proposal were received from the following sources: the Forest Supervisor of the Jefferson National Forest, the Virginia Department of Game and Inland Fisheries, the Virginia Natural Heritage Program, Dr. R.J. Neves of the Virginia Polytechnic Institute's Department of Fisheries and Wildlife Science, the City of Roanoke, the Friends of the Roanoke River, the Virginia Wildlife Federation, and one private citizen.

In his letters of support, the Jefferson National Forest Supervisor indicated that the Forest's activities have minimal potential for impacting the logperch, but special consideration would, nonetheless, be given to maintenance of high quality runoff within the headwaters of the Roanoke drainage.

The City of Roanoke asked that the Federal Government share in any "additional costs for community projects addressing needs along the Roanoke River and Tinker Creek", that may result from the listing. The Fish and Wildlife Service's authority under the Endangered Species Act would limit it to assisting with projects which contribute to the recovery of the logperch or other endangered species.

The Friends of the Roanoke River (F.O.R.R.) requested that critical habitat be designated for the logperch. The F.O.R.R. argues that designation of critical habitat is necessary to provide full protection for the logperch and that the benefits of this added protection would outweigh any possible threat of vandalism. The Service believes that designation of critical habitat would result in no net benefit to the species. The Service's basis for this conclusion is explained in the critical habitat section of this rule. The Service notes that, even without critical habitat designation, the habitats of this species will receive protection under section 7 of the Act.

Letters indicating neither support nor opposition to the proposed listing of the logperch were received from: The Wilmington District of the Army Corps of Engineers, and Montgomery and Henry Counties, Virginia. Information provided by the Corps of Engineers concerning projects under study is summarized elsewhere in this rule. Henry County expressed concern over potential effects of the listing on their water supply withdrawals from the mouth of Town Creek. Based on current information on logperch distribution and the location of the county's withdrawals, it appears that they will be unaffected by the listing.

Opposition to the proposal was expressed by the Roanoke Valley Home Builders Association, and the County Administrators of Pittsylvania and Roanoke Counties, Virginia. Roanoke County had a number of specific comments on the proposal which are listed below with the Service's response to each.

*Comment 1.* The Corps of Engineers' flood control project and Roanoke County's water supply project are no longer threats to the species; therefore it should not be Federally listed.

*Service response.* It is true that both the Corps of Engineers and the County of Roanoke have taken steps to reduce impacts from their projects to the Roanoke logperch. The Service agrees that the Upper Roanoke Flood Control Project is not a serious threat to the survival of the logperch. It is, however, a threat to the Roanoke River logperch population within the City of Roanoke. It is anticipated that this project may reduce the logperch population in this segment of the river by up to 25% over several years.

In comparison with the flood control project, the water supply project affects a much longer reach of the Roanoke River containing much of the best logperch habitat in existence. Thus, it has a much greater potential for serious impacts to the species. Corps of Engineers permit conditions for this project are designed to ameliorate such impacts, but will not eliminate them. Thus, the water supply project is expected to have some adverse effects on the logperch, even if all permit conditions are conscientiously implemented.

The Service cannot agree with Roanoke County that the Roanoke logperch does not warrant Federal listing. Even without the existence of these two proposed projects, the information on population status and other threats to the species would support its listing.

*Comment 2.* The proposal indicates several causes for degradation or modification of habitat, one being urban growth. This can be disputed since the largest and most dense population noted in Burkhead's study is in the middle of Ronoke City, a highly urbanized area.

*Service response.* It is known that pollutants found in urban runoff, including excess nutrients, petroleum products and salt, adversely affect fish. Urban runoff together with effluent discharges and other effects or urbanization may account for the long river reaches within the City of Roanoke from which the logperch is absent. Although there is a dense population of logperch at a single location within the City of Roanoke, the continued existence of this population may be dependent on periodic recruitment of young from upstream populations.

*Comment 3.* The proposal also notes that chemical spills have resulted in fish kills; however, no evidence is presented that the logperch has been affected or taken during a fish kill.

*Service response.* Burkhead (1983) describes the threat presented to the logperch by chemical spills. His compilation of records of fish kills in the Roanoke River was based largely on Roanoke Times and World News reports which provided limited information on species killed. However, there is little doubt that logperch were killed during these events along with other fish species.

*Comment 4.* The proposal indicates that low flows resulting from the proposed water supply project would severely degrade the logperch habitat. No proof exists to indicate the proposed project would "severely" degrade the logperch habitat. The indications of exposure of riffles, decreased D.O. levels, increased temperatures during summer and increased pollution are

assumptions that are not substantiated. In fact, the June 1983 Ecological Study Report by Noel Burkhead for the Corps of Engineers indicated increased D.O. levels because of low flow. It also shows that water temperature is more related to air temperature than flow levels. The exposure of riffles also indicates a benefit for increasing D.O. Levels.

*Service response.* Burkhead (1986) provides the most specific prediction of adverse effects on the logperch of the low flows resulting from the proposed water supply project. Exposure of riffles and increased water temperature during summer months are expected to occur in any river when flows drop to very low levels (Tennant, 1975). Periods of decreased dissolved oxygen (D.O.) and decreased dilution of pollutants will always accompany these changes. The increased D.O. in the Roanoke River during the low flow period referred to by Burkhead (1983) occurred during an algal bloom. During algal blooms, extreme fluctuations in D.O. are to be expected, with extremely high oxygen levels occurring during sunny periods, and oxygen depressions occurring during nighttime or overcast conditions. Such D.O. fluctuations are generally symptomatic of degraded conditions and are harmful to fish life.

*Comment 5.* Other projects are cited that will reportedly affect the logperch habitat. However, no economic effects of the listing are presented.

*Service response:* Under the Act and its implementing regulations, listing determinations are to be made solely on the basis of the best available scientific and commercial information regarding a species' status, without reference to possible economic or other impacts of such determination. 16 U.S.C. 1533(b)(1)(A); 50 CFR 424.11(b).

*Comment 6.* One of the most critical problem areas noted in the proposal was silt generated from agricultural activities. This seems to be the culprit of any reduction or modification of habitat. Without knowing the intentions of the Fish and Wildlife Service as to the plan to control these activities, no one can possibly comment on the effects it may have on the farming activities along the critical habitat areas.

*Service response:* Silt generated by agricultural activities is but one of many factors affecting the logperch. While the Service may recommend measures, such as filter strips along streams, to reduce agricultural runoff, it has no authority to require such modifications of private activities unless they result in taking of the species.

*Comment 7.* The existing and continued studies performed on this fish seem to be the only over-utilization evident. As noted in correspondence from Burkhead, over 2,000 collections were made, many of which were specifically aimed at the capture of the logperch.

*Service response:* There is no evidence to suggest that overutilization has been a factor in the decline of the logperch.

*Comment 8.* The proposal notes that Virginia state law does not protect the species' habitat from potential impacts. Roanoke County disagrees with this statement. The State of Virginia does have code sections that protect aquatic life, water quality and critical habitat of endangered species and of any outstanding State resource waters.

*Service response:* State programs to enforce the Clean Water Act do provide a degree of protection for all aquatic species. Federal listing will provide added protection, particularly from those impacts of Federal (or Federally regulated) projects which are not addressed by the Clean Water Act.

*Comment 9.* The use of chemical toxicants is prohibited in any river in Virginia. State law prohibits any discharge of these materials. Vandalism along with the suggestion of chemical toxicant use stretches the point under this heading and should not be considered.

*Service response:* All reference to chemical toxicants has been removed from the "Summary of Factors Affecting the Species". Although State laws prohibit such discharges, enforcement may be difficult.

*Comment 10.* The only significant decline in logperch populations has been in the reaches where farming activities are prominent, not where urbanization has occurred or low water levels exist. In fact, low water levels seem to be more of an optimum habitat than higher flows. Over 77 percent of the river miles occupied by the logperch are in reaches where flows are only a small portion of the flows that exist in the main stream of the Roanoke River.

*Service response:* See response to comments 2 and 6 regarding the threats presented by siltation and urbanization. Adverse effects of low flows are described in Burkhead (1986), Tennant (1975) and Camp Dresser and McKee (1986). The absolute flow levels in a river have little meaning in terms of the biology of aquatic species. Instead, fishery biologists generally refer to flows in terms of percentage of natural stream flow (or mean annual flow) when they are evaluating impacts on aquatic species. To date, withdrawals from the Roanoke River have been small enough that any reduction in natural flows has been minor. Thus no fish declines would be expected to result.

**Summary of Factors Affecting the Species**

After a thorough review and consideration of all information available, the Service has determined that the Roanoke logperch should be classified as an endangered species. Procedures found at section 4(a)(1) of the Endangered Species Act (16 U.S.C. 1531 *et seq.*) and regulations (50 CFR part 424) promulgated to implement the listing provisions of the Act were followed. A species may be determined to be an endangered or threatened species due to one or more of the five factors described in section 4(a)(1). These factors and their application to the Roanoke logperch (*Percina rex*) are as follows:

*A. The Present or Threatened Destruction, Modification, or Curtailment of its Habitat or Range*

The largest known population of the logperch, in the upper Roanoke River, is under increasing stress from urbanization and industrial development (Jenkins 1979). Urban runoff and other nonpoint-source pollution are increasing problems. Silt, oil, fertilizer and a variety of chemical pollutants in this runoff degrade habitat of the logperch. As urban development expands to the west along the Roanoke River Valley, the river reach degraded by this runoff will increase. Frequent chemical spills have occurred from the industries and transportation corridors along the upper Roanoke River. These have included fuel oil, diesel fuel, sodium cyanide, toluene, gasoline and ethyl benzeyne-creosote (Burkhead 1983). Many of these spills have resulted in fish kills, several extending over a distance of six miles or more downstream.

Additional threats in the upper Roanoke River habitat could result from the proposed West Roanoke County Water Supply Project, the Corps of Engineers' Upper Roanoke River Flood Control Project and the National Park Service's Roanoke River Parkway proposal. The water supply project is intended to supply projected future water needs of Roanoke County by withdrawal of water from the Roanoke River. As projected, it could result in long periods when a seven-mile reach of the Roanoke River would be drawn down to low flow levels. This river reach provides excellent logperch habitat (Burkhead 1986) that could be adversely affected by such extended low flows. Predicted effects of these low flow periods include exposure of riffles,

decreased dissolved oxygen, increased pollution concentrations, and increased water temperatures during the summer and early fall. Certain recent project modifications, however, lessen the expected severity of these effects.

The Corps of Engineers flood control project involves proposed channel modification of the upper Roanoke River within the city limits of Roanoke. Although the Corps has funded studies of the logperch and worked with the Service to reduce project impacts, some adverse effects on the logperch are expected. Several other smaller flood control projects in the Roanoke drainage are under study by the Corps of Engineers. Until these projects have been defined, it is not known what impacts, if any, they will have on the logperch.

The National Park Service's Roanoke River Parkway could adversely affect the logperch if it is constructed adjacent to the upper Roanoke River, but until the proposal goes beyond the conceptual stage, the significance of its impacts, if any, will remain unknown.

Most of the rivers supporting the logperch are subject to siltation resulting from agricultural activities and other developments in their watersheds. The Pigg River and the North Fork of the Roanoke, in particular, are impacted by silt generated from agriculture. This may partially account for the recently observed decline of the species in the North Fork of the Roanoke River (Simonson and Neves 1986).

*B. Overutilization for Commercial, Recreation, Scientific or Educational Purposes*

There is no evidence to suggest that overutilization for any of these purposes has contributed to the decline of the logperch. Because of the species' low numbers, overcollection could adversely affect its smaller populations occurring outside the mainstem Roanoke River.

*C. Disease or Predation*

There is no evidence that disease is a threat to this species. Predation may constitute a significant portion of the mortality of the larval and post larval stages (Burkhead 1983), but this is not considered a significant threat so long as reproductive rates remain normal.

*D. The Inadequacy of Existing Regulatory Mechanisms*

Virginia State law (Sections 29.1–412 and 29.1–418) requires a permit for the scientific collection of freshwater fishes, but does not protect the species' habitat from the potential impacts of Federal projects. Federal listing would provide protection for the species under the Endangered Species Act by requiring Federal agencies to consult with the Service when projects they fund, authorize or carry out may affect the species.

*E. Other Natural or Manmade Factors Affecting Its Continued Existence*

The logperch is vulnerable to vandalism, particularly the small populations found at locations other than the mainstem Roanoke River.

The Service has carefully assessed the best scientific and commercial information available regarding the past, present, and future threats faced by this species in determining to make this rule final. Based on this evaluation, the preferred action is to list the Roanoke logperch as endangered. Each of the four relatively small and widely separated populations of the logperch is susceptible to extirpation through continued adverse habitat modification. Several imminent threats are now present in the upper Roanoke River drainage, which supports the species' largest population. Furthermore, the most recent comprehensive survey for the species (Simonson and Neves 1986) indicates a sharp decline in the North Fork Roanoke population and low population densities for all populations of the fish. Although three other populations of the species are extant, two of these populations (in the Nottoway River and the Smith River) are highly vulnerable to threats because of their small size; the third, in the Pigg River, is threatened by siltation. In view of the serious problems faced by the logperch, threatened status is not appropriate.

**Critical Habitat**

Section 4(a)(3) of the Act, as amended, requires that to the maximum extent prudent and determinable, the Secretary designate critical habitat at the time a species is determined to be endangered or threatened. As outlined above under Factors "B" and "E", the species is vulnerable to overcollection and vandalism. The Service finds that designation of critical habitat is not prudent for the Roanoke logperch. No benefit to the species has been identified that would outweigh the potential threats of collection or vandalism, which would be exacerbated by publication of a detailed critical habitat description. The Corps of Engineers has conducted studies of the upper Roanoke River population of the logperch and is familiar with the species' total distribution. It is the agency that would be involved with most projects or permits affecting the species' habitat. Several other Federal agencies have also been notified of the Roanoke logperch's distribution and requested to provide data on proposed Federal projects that might adversely affect the species. The involved Federal agencies thus already have the species' distributional data needed to determine if the species may be impacted by their action.

**Available Conservation Measures**

Conservation measures provided to species listed as endangered or threatened under the Endangered Species Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain practices. Recognition through listing encourages and results in conservation actions by Federal, State, and private agencies, groups, and individuals. The Endangered Species Act provides for possible land acquisition and cooperation with the States and requires that recovery actions be carried out for all listed species. Such actions are initiated by the Service following listing. The protection required of Federal agencies and the prohibitions against taking and harm are discussed, in part, below.

Section 7(a) of the Act, as amended, requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as endangered and with respect to its critical habitat, if any is being designated. Revised regulations implementing this interagency cooperation provision of the Act were published on June 3, 1986 (51 FR 19926). Section 7(a)(2) requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of a listed species or to destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency must enter into formal consultation with the Service.

Federal activities that could impact the Roanoke logperch include, but are not limited to, the following: Issuance of permits for steam alterations, reservoir construction, wastewater facility development, flood control projects, and road and bridge construction on the river reaches supporting the logperch. Three specific proposed actions with Federal involvement that may affect the logperch are the West Roanoke County Water Supply Project, the Upper Roanoke River Flood Control Project, and the Roanoke River Parkway. These projects and potential impacts on the species are described above. Modifications of these planned activities may be necessary to protect the

Roanoke logperch. It has been the experience of the Service that nearly all section 7 consultations are resolved so that the species is protected and the project objectives are met.

The Act and implementing regulations found at 50 CFR 17.21 set forth a series of general prohibitions and exceptions that apply to all endangered wildlife. These prohibitions, in part, make it illegal for any person subject to the jurisdiction of the United States to take, import or export, ship in interstate commerce in the course of a commercial activity, or sell or offer for sale in interstate or foreign commerce any endangered fish or wildlife species. It also is illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that has been taken illegally. Certain exceptions apply to agents of the Service and State conservation agencies.

Permits may be issued to carry out otherwise prohibited activities involving endangered wildlife species under certain circumstances. Regulations governing permits are at 50 CFR 17.22 and 17.23. Such permits are available for scientific purposes, to enhance the propagation or survival of the species, and/or for incidental take in connection with otherwise lawful activities.

### National Environmental Policy Act

The Fish and Wildlife Service has determined that an Environmental Assessment, as defined under the authority of the National Environmental Policy Act of 1969, need not be prepared in connection with regulations adopted pursuant to section 4(a) of the Endangered Species Act of 1973, as amended. A notice outlining the Service's reasons for this determination was published in the **Federal Register** on October 25, 1983 (48 FR 49244).

### References Cited

Burkhead, N.M. 1983. Ecological studies of two potentially threatened fishes (the orangefin madtom, *Noturus gilberti*, and the Roanoke logperch, *Percina rex*) endemic to the Roanoke River drainage. Report to Wilmington District Corps of Engineers, Wilmington, North Carolina. 155 pp.

Burkhead, N.M. 1986. Potential impact of the West County Reservoir Project on two endemic rare fish and the aquatic biota of the upper Roanoke River, Roanoke County, Virginia. Report to Roanoke County Public Facilities Dept., Roanoke, Virginia. 15 pp.

Camp Dresser and McKee. 1986. Minimum Instream Flow Study. Commonwealth of Virginia, State Water Control Board, Richmond, Virginia. 320 pp.

Jenkins, R.E. 1979. Freshwater and Marine Fishes. *In* D.W. Linzey (ed.), Endangered and Threatened Plants and Animals of Virginia. Virg. Poly. Inst. and State Univ., Blacksburg, Virginia. pp. 319–373.

Jordan, D.S. 1889. Description of fourteen species of freshwater fishes collected by the United States Fish Commission in the summer of 1888. Proc. U.S. Natl. Mus. 11:351–362.

Simonson, T.D., and R.J. Neves. 1986. A status survey of the orangefin madtom (*Noturus gilberti*) and Roanoke logperch (*Percina rex*). Report for the Virginia Commission of Game and Inland Fisheries, Richmond, Virginia. 103 pp.

Tennant, D.L. 1975. Instream Flow Regimens for Fish, Wildlife, Recreation and Related Environmental Resources. U.S. Fish and Wildlife Service, Billings, Montana. 30 pp.

### Author

The primary author of this final rule is G. Andrew Moser, Annapolis Field Office, U.S. Fish and Wildlife Service, 1825 Virginia Street, Annapolis, Maryland 21401 (301/269–5448).

### List of Subjects in 50 CFR Part 17

Endangered and threatened wildlife, Fish, Marine mammals, Plants (agriculture).

### Regulation Promulgation

## PART 17—[AMENDED]

Accordingly, part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations is amended, as set forth below:

1. The authority citation for part 17 continues to read as follows:

**Authority:** Pub. L. 93–205, 87 Stat. 884; Pub. L. 94–359, 90 Stat. 911; Pub. L. 95–632, 92 Stat. 3751; Pub. L. 96–159, 93 Stat. 1225; Pub. L. 97–304, 96 Stat. 1411; Pub. L. 100–478, 102 Stat. 2306; Pub. L. 100–653, 102 Stat. 3825 (16 U.S.C. 1531 *et seq.*); Pub. L. 99–625, 100 Stat. 3500, unless otherwise noted.

2. Amend § 17.11(h) by adding the following, in alphabetical order under "Fishes," to the List of Endangered and Threatened Wildlife:

**§ 17.11 Endangered and threatened wildlife.**

* * * * *

(h) * * *

| Species | | Historic range | Vertebrate population where endangered or threatened | Status | When listed | Critical habitat | Special rules |
|---|---|---|---|---|---|---|---|
| Common name | Scientific name | | | | | | |
| Fishes: | | | | | | | |
| * | * | * | * | * | * | * | |
| Logperch, Roanoke | *Percina rex* | U.S.A. (VA) | Entire | E | 359 | NA | NA |
| * | * | * | * | * | * | * | |

Dated: July 18, 1989.

**Susan Recce Lamson,**

*Acting Assistant Secretary for Fish and Wildlife and Parks.*

[FR Doc. 89–19439 Filed 8–17–89; 8:45 am]

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